

# VIRGINIA'S PHYSICIAN WORKFORCE AND RELATED POLICIES

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State Health Commissioner's Advisory  
Council on Health Disparity & Health Equity

April 8, 2014

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Joint Commission on Health Care

# Agenda

- Physician Supply, Shortages, and Maldistribution
- Medical School Graduates, Residencies, and Geriatric Training
- Recent Impacts and State Policies
- JCHC Approved Policy Options

# PHYSICIAN SUPPLY, SHORTAGES, AND MALDISTRIBUTION

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## The Physician Workforce At a Glance

### The Workforce

Licensees:	39,197
Virginia's Workforce:	19,697
Full-Time Equiv. Units:	19,654

### Survey Response Rate

All Licensees:	69%
Renewing Practitioners:	76%

### Demographics

% Female:	35%
Diversity Index:	49%
Median Age:	51

### Background

HS Degree in VA:	20%
Med School in VA:	20%
Residency in VA:	27%

### Specialty/Role

Primary Care:	42%
Board Certified:	67%

### Finances

Median Income:	\$175k-\$200k
Health Benefits:	55%
Under 40 w/ Ed debt:	68%

### Income by Role

Primary Care:	\$150k-\$175k
Non-Pri Care:	\$200k-\$225k
Highest:	Anesthesiology

### Access

Practice is Full:	3%
Medicaid Participant:	61%

### Typical Time Spent

Patient Care:	90-99%
Administration:	1-9%
% Primarily Pat. Care:	86%

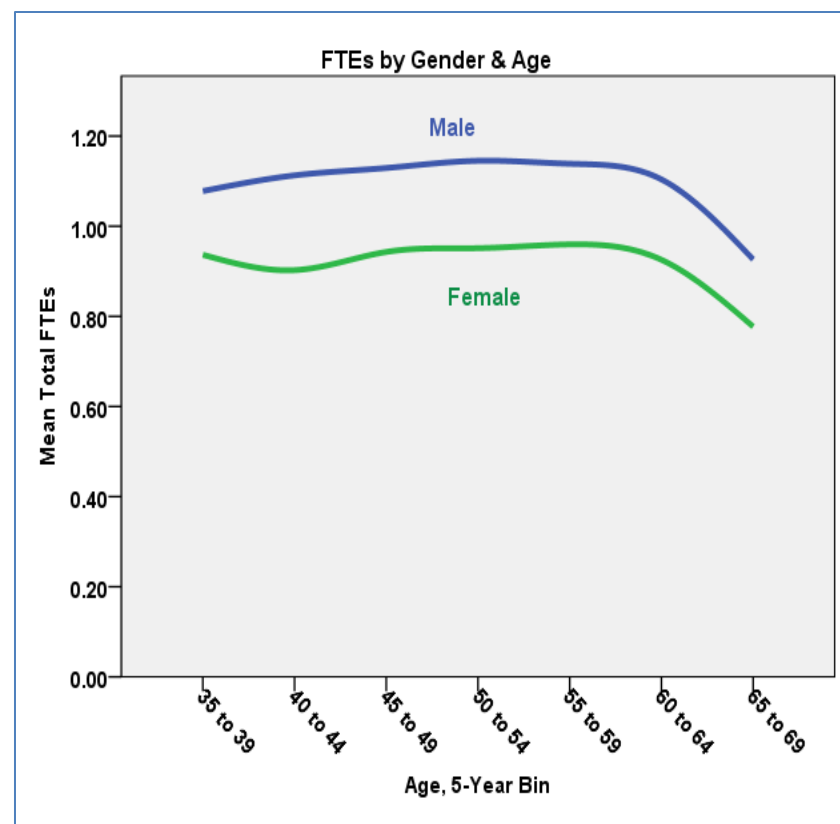
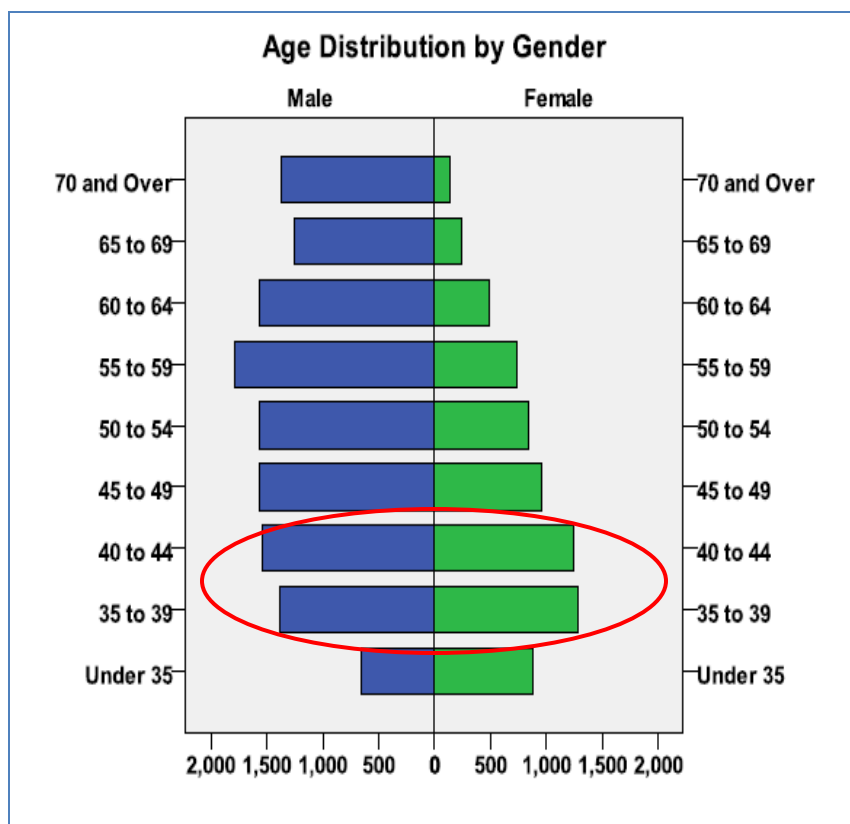
Source: Va. Healthcare Workforce Data Center

# Racial and Ethnic Diversity

Race/ Ethnicity	Virginia Population	All Physicians		Physicians Under 40	
	%	Weighted Estimate	%	Weighted Estimate	%
White, non-Hispanic	64%	12,253	69%	2,242	60%
Black, non-Hispanic	19%	1,377	8%	349	9%
Hispanic of any race	8%	597	3%	133	4%
Asian or Pacific Islander	6%	2,948	17%	824	22%
American Indian or Alaskan Native	0%	17	0%	7	0%
Other Race	-	417	2%	131	4%
Two or more races	2%	204	1%	77	2%

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.

# Gender and FTEs



This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.

# Age and Retirement

Retirement Age	Weighted Estimate	%
Under Age 50	92	1%
50 to 54	299	2%
55 to 59	1,074	7%
60 to 64	3,330	21%
65 to 69	5,696	36%
70 to 74	2,752	17%
75 to 79	1,004	6%
80 and Over	422	3%
Not Retiring	1,230	8%
<b>Total</b>	<b>15,871</b>	<b>100%</b>

Age	Total FTEs	
	Mean	Sum
Under 35	1.01	1,556
35 to 39	1.01	2,722
40 to 44	1.02	2,847
45 to 49	1.06	2,689
50 to 54	1.08	2,634
55 to 59	1.09	2,775
60 to 64	1.06	2,194
65 to 69	0.90	1,359
Over 69	0.57	876
<b>Total</b>	<b>1.00</b>	<b>19,654</b>

***Median Age is 51. Nearly 20% of physicians expect to retire within the next 5 years.***

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.

# Virginia Has Over 16,000 Practicing Physicians and 40% Are Primary Care Providers

Specialty	Number	Percentage
Family Medicine	2782	17%
General Internal Medicine	2008	12%
Pediatric	1744	11%
Radiology	1255	8%
Obstetrics and Gynecology	1236	8%
Psychiatry	1209	7%
Other*	6151	38%
<b>Total Physicians</b>	<b>16,385</b>	<b>100%</b>

\*See Appendix for additional breakout of physician specialty counts

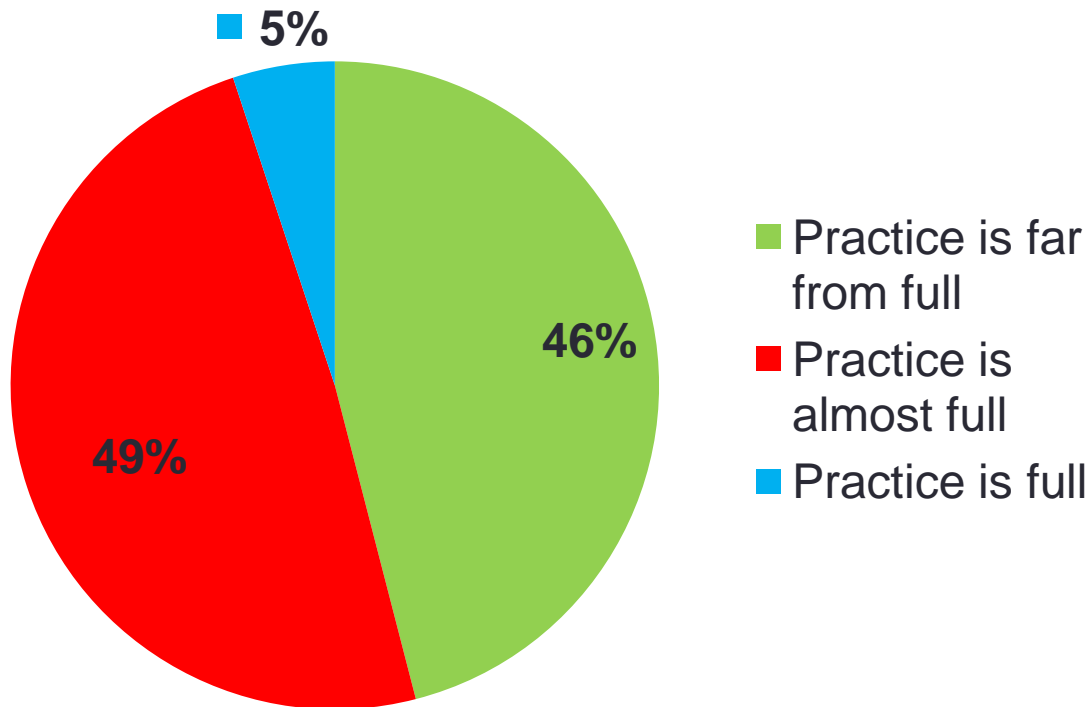


Primary care specialties are highlighted

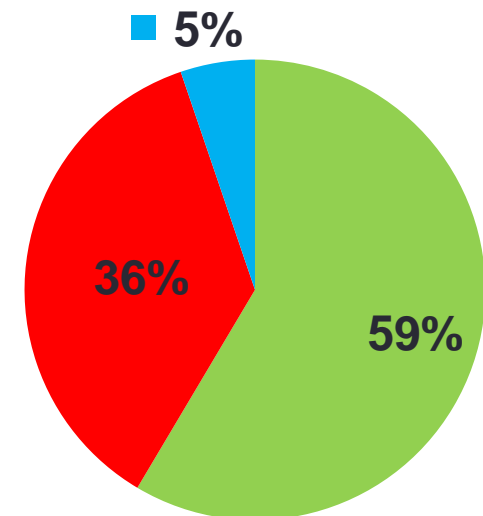


# 46% of Physicians that Manage Patient Load Primary Work Practices Are “Far from Full”

**Primary Work Location**  
(n= 11,621)



**Secondary Work Location**  
(n=2,602)



Note: Number and percentage are weighted estimates of physicians that manage patient load from Department of Health Professions Physician Survey

## 2013 JLARC Study: *Impact of Medicaid Payment Policies on Access to Health Care Services for Virginians*

JLARC's report on the *Impact of Medicaid Payment Policies on Access to Health Care Services for Virginians* includes:

- Statewide and regional provider availability
- Measures of provider availability other than participation rates
- Examine availability for a broad array of providers beyond just physicians, such as dentists, mental health practitioners, etc.

### Estimate of the Medicaid Participating Providers: Source Billed Claims

FY12	Medicaid Participation Rate
Primary Care	75%
Specialists	47%
All Physicians	62%

Notes: Medicaid Participating means 10 or more patients in the fiscal year.

Specialist counts exclude anesthesiologists and radiologists.

All physicians count from DHP annual survey of Virginia Physicians

# Access to Care Was Examined Using Four Measures

## Provider availability\*



Provider participation rate

Percentage of all Virginia providers who treated Medicaid enrollees



# providers / 1,000 enrollees

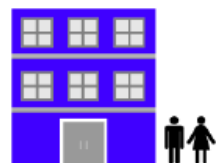
# of Medicaid providers available for every 1,000 Medicaid enrollees

## Use of services



% of enrollees receiving care

% of enrollees that received service at least once during the year



# visits / 1,000 enrollees

# of visits for every 1,000 Medicaid enrollees

\*For physicians, measures of provider availability include only those that served 10 or more enrollees.

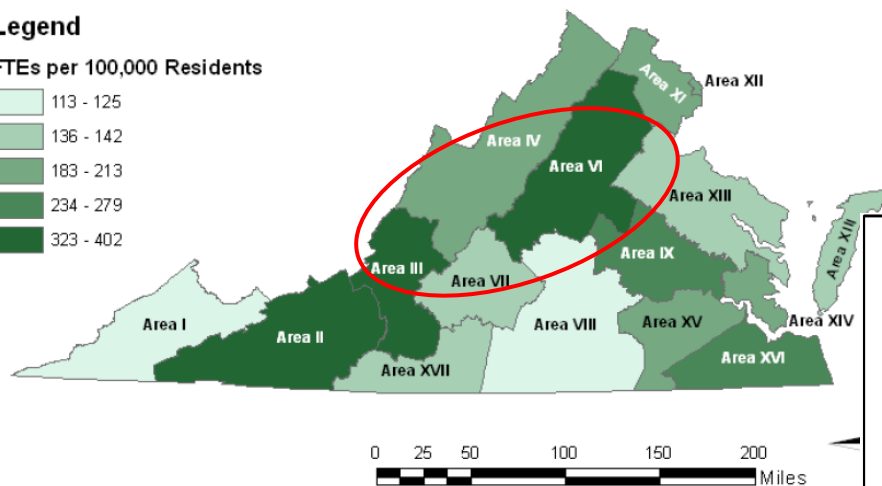
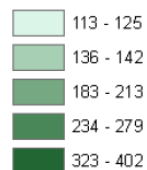
*JLARC Impact of Medicaid Payment Policies Study*

# Physicians Per Person Ratios Vary by Region

**Full-Time Equivalency Units per 100,000 Residents by Workforce Investment Area**

**Legend**

FTEs per 100,000 Residents

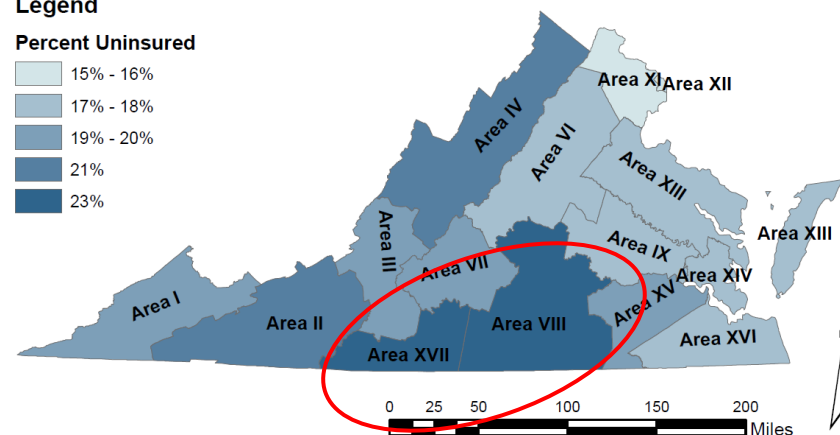
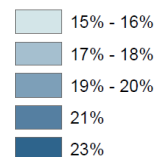


Southside Virginia has a high proportion of uninsured adults and a low number of physician FTEs per resident.

**Uninsured Adult Population by Workforce Investment Area**

**Legend**

Percent Uninsured



Data Source: Virginia Atlas of Community Health

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.

## Virginia Primary Care Health Professional Shortage Areas (HPSA) \*

**(HPSA)\***

Updated 9/5/2012

**Geographic Primary Care HPSA**

**Population Primary Care HPSA**

\* Up-to-date designation data may be obtained from HRSA Shortage Designation Branch: <http://datawarehouse.hrsa.gov/datadownload.aspx>.

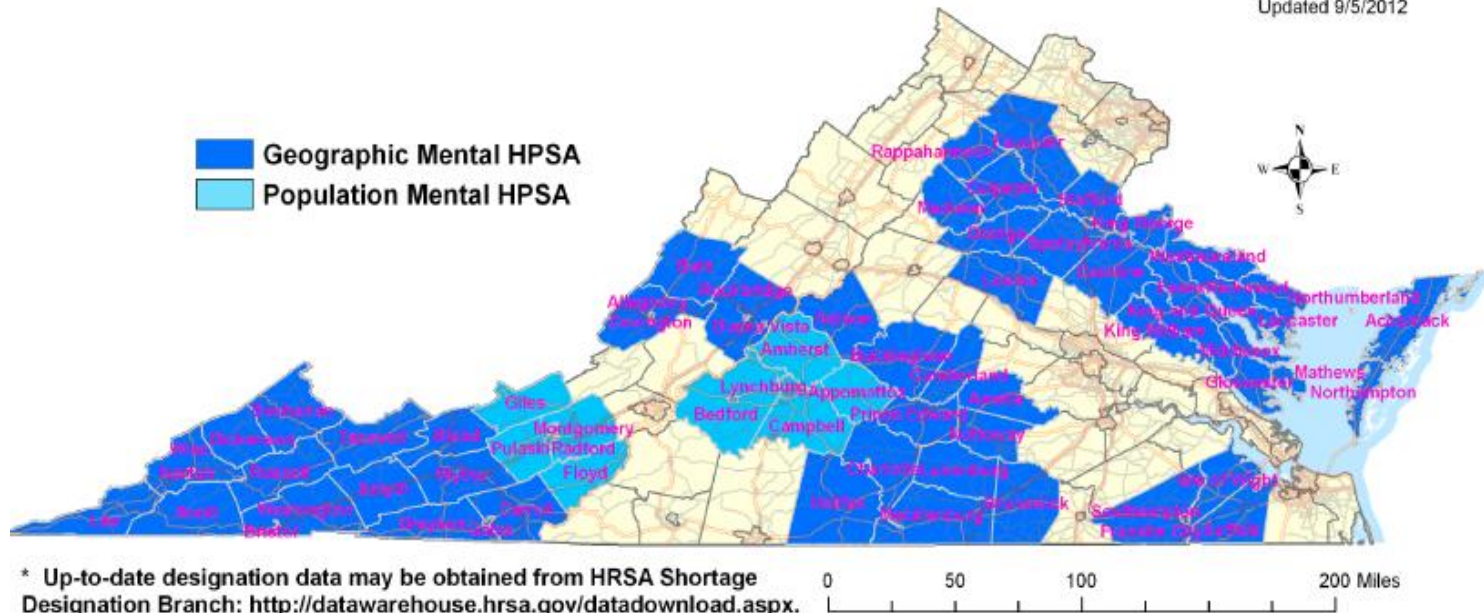
\* Up-to-date designation data may be obtained from HRSA Shortage Designation Branch: <http://datawarehouse.hrsa.gov/datadownload.aspx>.

Note: Health Resources & Services Adm. (HRSA) Primary Care Health Professional Shortage designation uses full-time equivalent primary care physician to population ratios

# Mental Health Professional Shortage Areas

## Virginia Mental Health Professional Shortage Areas (HPSA) \*

Updated 9/5/2012



Note: HPSA Mental Health Professional Shortage Area designation uses different provider to population ratios depending on whether a psychiatrist or core mental health professional (psychiatrist, clinical psychologist, clinical social worker, psychiatric nurse specialist, family and marriage therapist).

# Current and Future Geriatrician Shortages Mean Other Providers Will Fill the Gap

- Between 2005 and 2030, the number of adults aged 65 and older in the United States will almost double (37 million to 70 million)
- Older adults use a disproportionate amount of medical services. By population, individuals over 65 years of age make up only about 12% of the U.S. population, they account for:
  - 26% of all physician office visits,
  - 47% of all hospital outpatient visits with nurse practitioners,
  - 35% of all hospital stays,
  - 34% of all prescriptions,
  - 38% of all emergency medical service responses, and
  - 90% of all nursing-home use.
- 7,356 certified geriatricians were practicing in the U.S. in 2012 and 30,000 will be needed by 2030 (American Geriatrics Society)
- Fewer than 3 percent of students in medical schools choose to take geriatric electives.

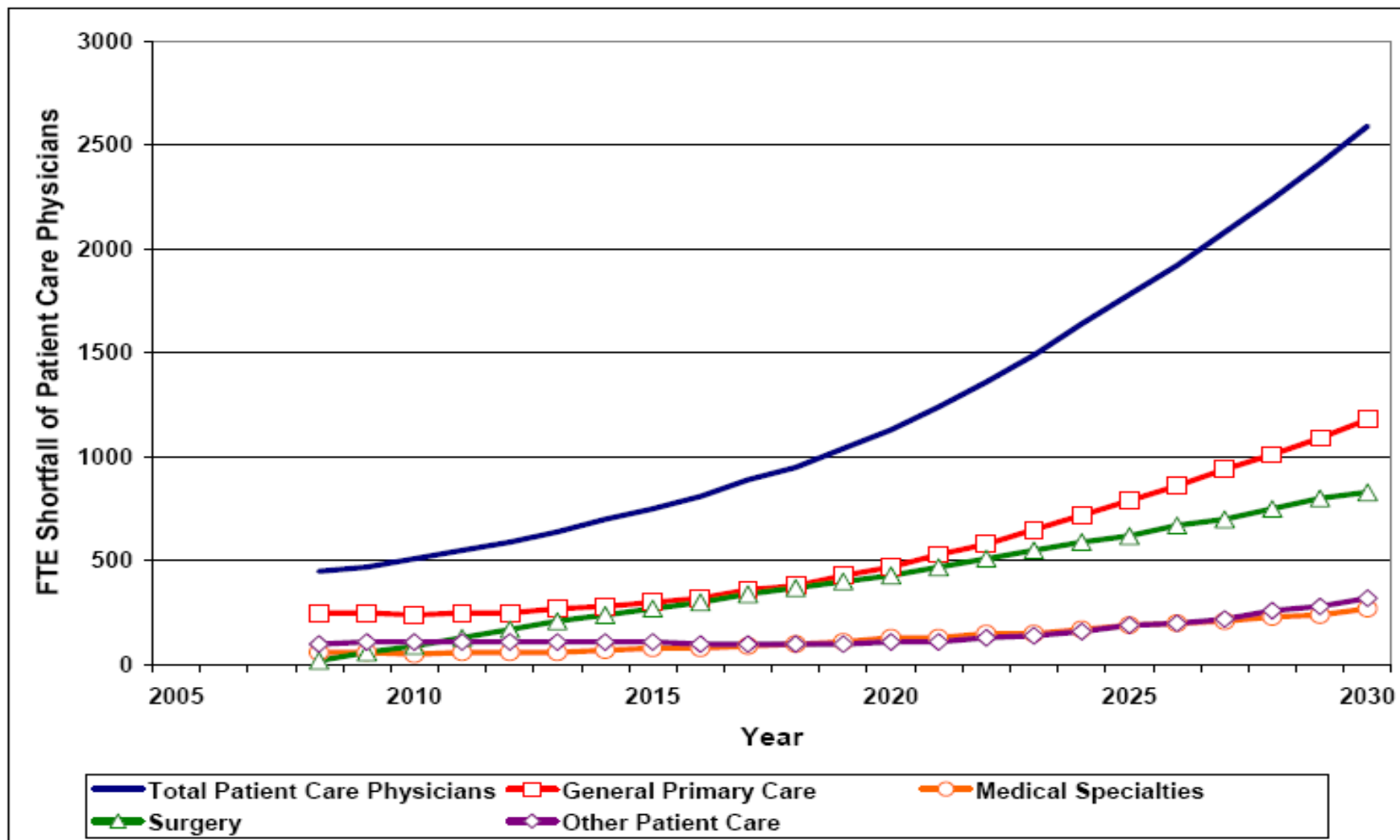


# Forecasts of Specialty Physician Shortage or Surplus Should Be Considered with Caution

- The health care workforce (entry, retention, exit and re-entry) can be subject to unpredictable and variable supply-side influences.
  - Labor market factors: licensure requirements and skills portability
  - Structural workforce issues: participation levels, workforce aging, lifestyle factors and gender.
- Demand-side variables can be unpredictable as well.
  - Shifting utilization patterns of reflecting changes in consumer expectations of health care
  - Policy changes that impact pricing and payment systems
  - Number of insured and evolving service delivery models.



## 2010 DHP Report: Projected Future Shortages Would Be Most Prevalent in Primary Care and Surgery Specialties



# Team-Based Health Care Is More Accepted and Can Be Used to Address Shortages

## *Health Affairs*

### WORKFORCE

By Michael J. Dill, Stacie Pankow, Clese Erikson, and Scott Shipman

## **Survey Shows Consumers Open To A Greater Role For Physician Assistants And Nurse Practitioners**

June  
2013

### CARE TRANSFORMATION

By Linda V. Green, Sergei Savin, and Yina Lu

## **Primary Care Physician Shortages Could Be Eliminated Through Use Of Teams, Nonphysicians, And Electronic Communication**

January  
2013

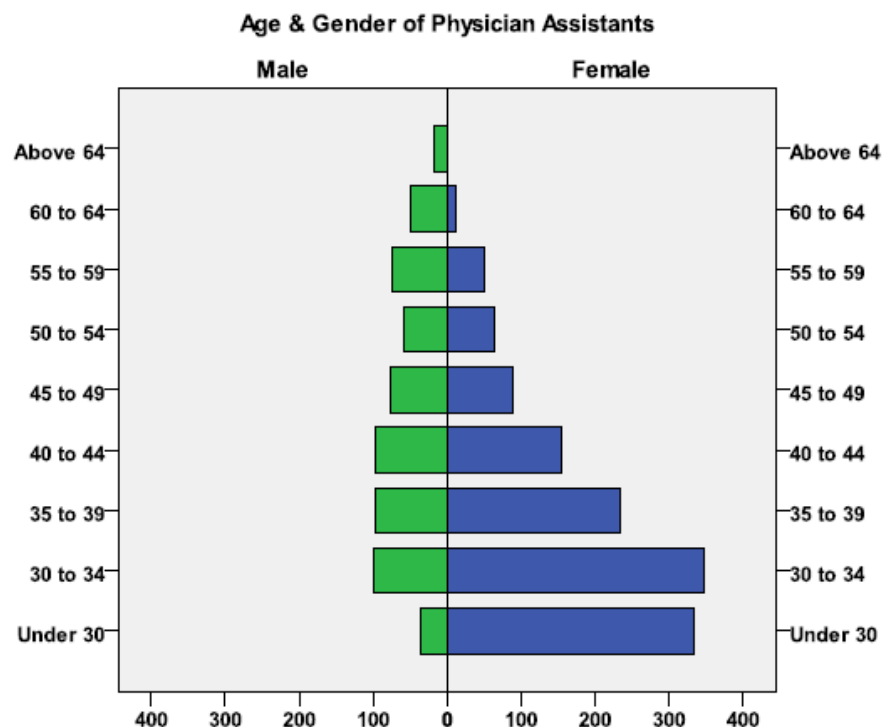
# Mid-Level Healthcare Practitioners

## Physician Assistants

1,891 in Workforce

1,775 FTEs

Median Age: 37

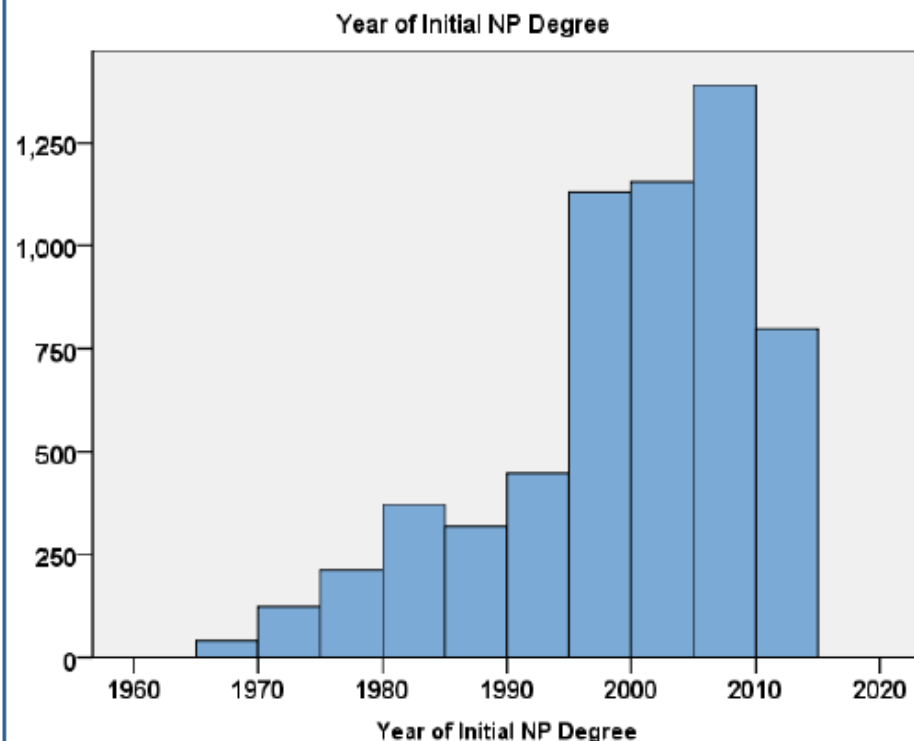


## Nurse Practitioners

6,056 in Workforce

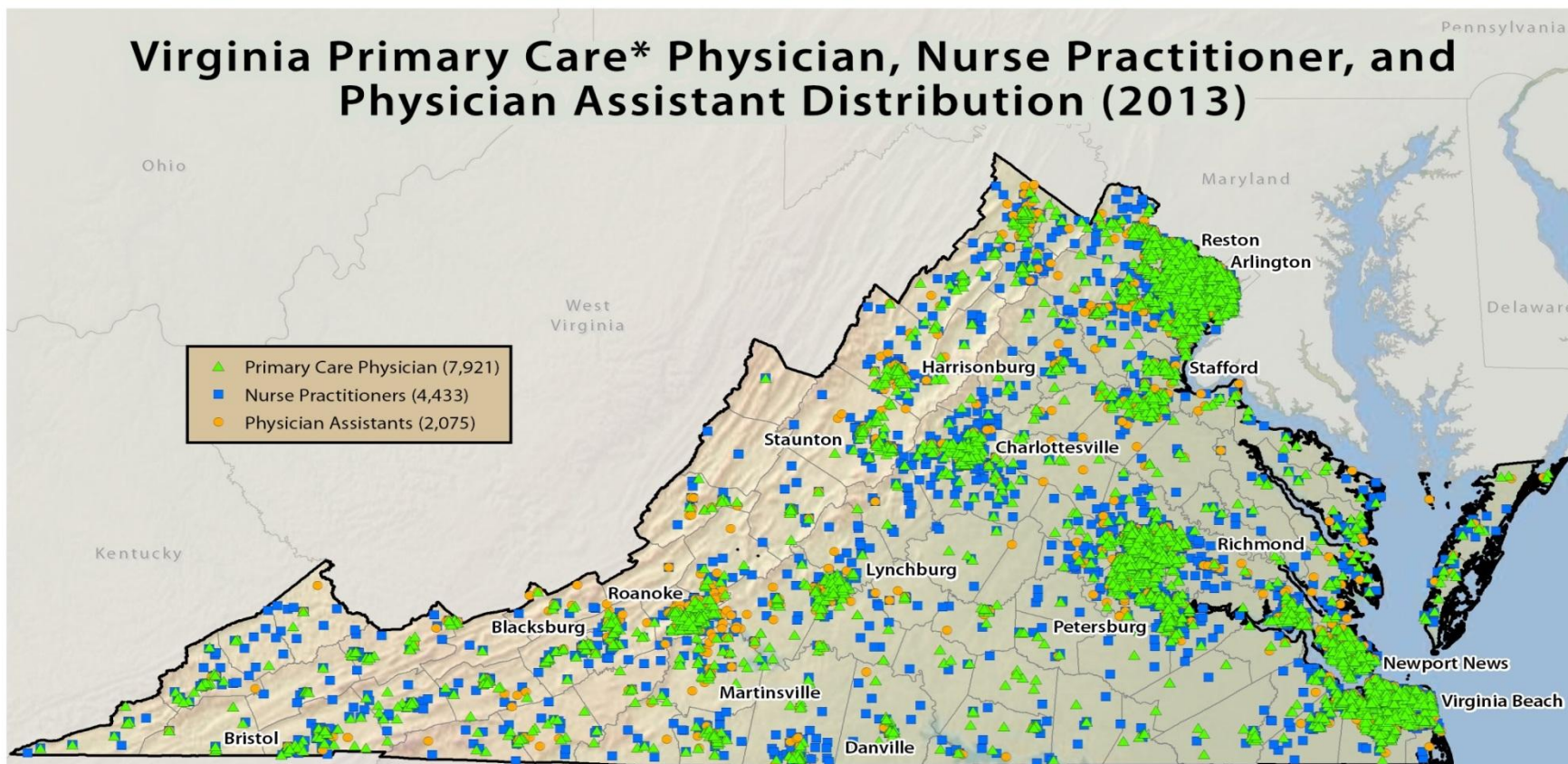
6,435 FTEs

*Half became NPs after Y2000*



This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.

# Virginia Primary Care\* Physician, Nurse Practitioner, and Physician Assistant Distribution (2013)



	Total	Family Medicine	General Practice	Internal Medicine	Obstetrics and Gynecology	Pediatrics	Total Primary Care	%	PC in Rural	%	PC in MUA	%	PC in PC-HPSA	%
Osteopathic Physicians	1,201	296	38	123	46	50	553	46%	118	21%	69	12%	27	5%
Allopathic Physicians	21,176	2,506	335	1,051	2,087	1,389	7,368	35%	904	12%	644	9%	210	3%
<b>Totals</b>	<b>22,377</b>	<b>2,802</b>	<b>373</b>	<b>1,174</b>	<b>2,133</b>	<b>1,439</b>	<b>7,921</b>	<b>35%</b>	<b>1,022</b>	<b>13%</b>	<b>713</b>	<b>9%</b>	<b>237</b>	<b>3%</b>
<b>% Change from 2008</b>	<b>4%</b>	<b>16%</b>	<b>6%</b>	<b>41%</b>	<b>117%</b>	<b>14%</b>	<b>13%</b>		<b>3%</b>		<b>56%</b>		<b>67%</b>	

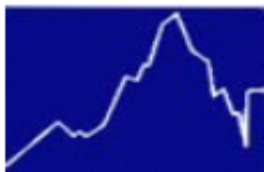
Data Sources: NCAHD's Enhanced State Licensure Data (2013); Rural based on OMB Metro/Non-Metro definition (06/2010); PC-HPSA and MUA from HHS/HRSA (08/2013)

\*Primary Care Physicians include the following specialties: Family Medicine, General Practice, Internal Medicine, Obstetrics & Gynecology, and Pediatrics

**NCAHD**  
National Center for the  
Analysis of Healthcare Data

Map created by the  
National Center for the  
Analysis of Healthcare Data  
August, 2013

Note: Workforce-provider counts vary depending on source data and methodology. As a result, data trends are more informative than specific provider counts.



## Virginia Healthcare Workforce Data Center

### Virginia's Pharmacy Workforce: 2011

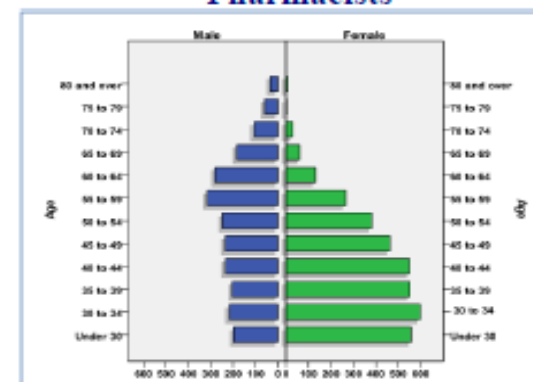
[www.dhp.virginia.gov/hwdc/](http://www.dhp.virginia.gov/hwdc/)

Virginia Department of Health Professions  
Perimeter Center  
9960 Mayland Drive, Suite 300  
Henrico, Virginia 23233-1463  
804-367-2115  
<http://www.dhp.virginia.gov/>

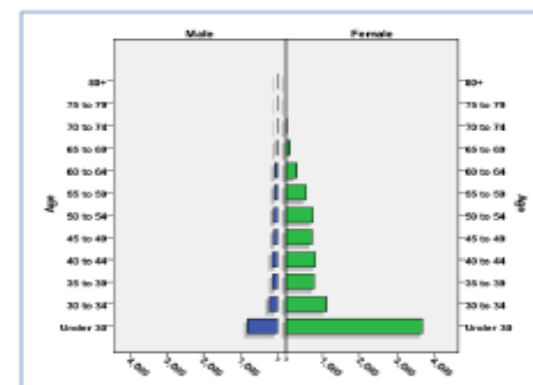
HWDC QuickStats:	Pharmacists	Pharmacy Technicians
<b>Capacity</b>		
Workforce Size	6,605	11,439
Full-Time Equivalency Units	5,532	8,613
Average Annual Hours	1,825	1,754
<b>Demographics</b>		
% Female	61%	77%
% under 40	39%	65%
% 55 & over	15%	5%
<b>Wages</b>		
Median wage	\$48 to \$60/hr	\$11-\$13/hr
Employer Provided Health Insurance	64%	45%
<b>Three Largest Establishment Types (Primary Location)</b>		
Large Chain Community Pharmacy	31%	40%
Private Hospital/Health System, inpatient	20%	11%
Independent Community Pharmacy	10%	13%

### AGE & GENDER PYRAMIDS

#### Pharmacists



#### Pharmacy Technicians



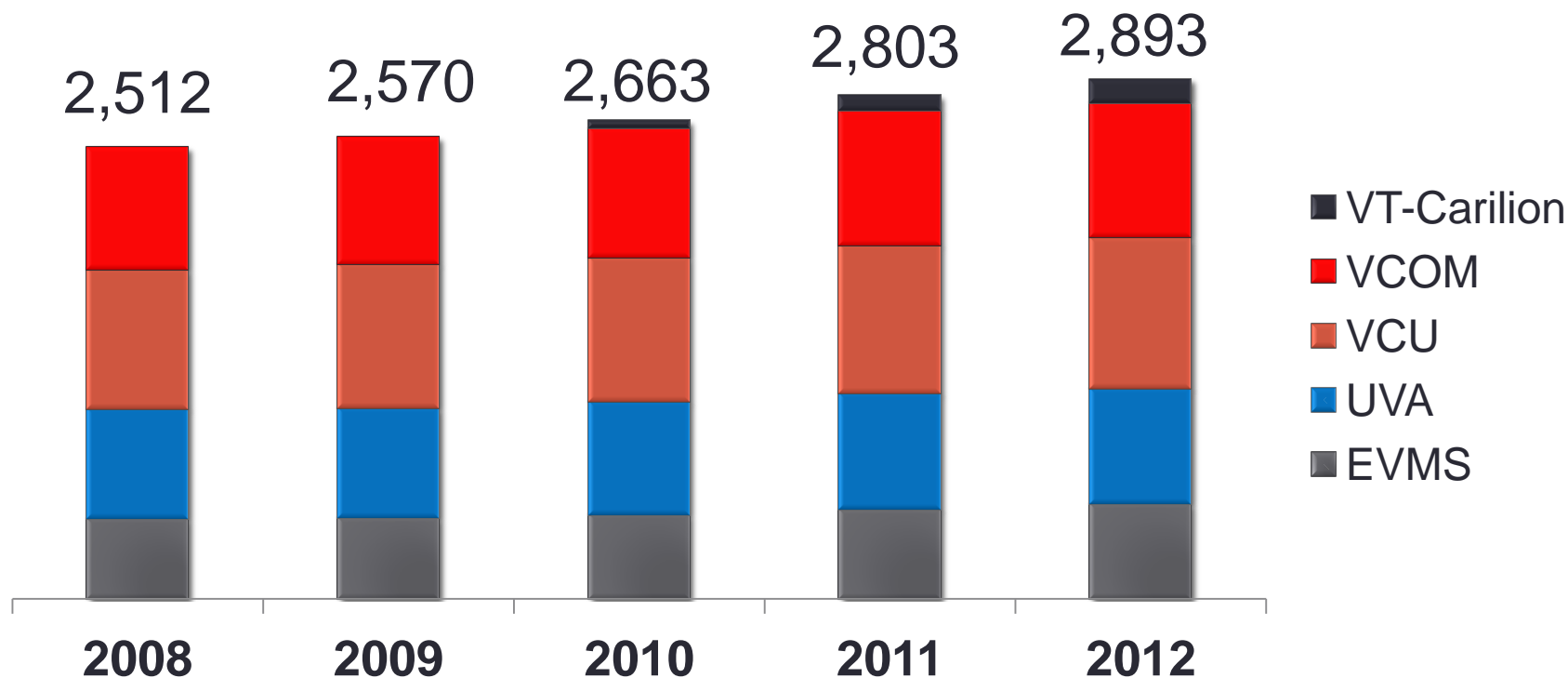
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# MEDICAL SCHOOL GRADUATES, RESIDENCIES, AND GERIATRIC TRAINING

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# Medical School Enrollment in Virginia Has Increased 15% since 2008



Note: Liberty College of Osteopathic Medicine inaugural class is expected to begin fall 2014 and enroll 150 students each year.

Sources: American Association of Medical Colleges, Table 26: Total Enrollment by U.S. Medical School and Sex, 2008-2012 at <https://www.aamc.org/download/321526/data/2012factstable26-2.pdf>; American Association of Colleges of Osteopathic Medicine, Applications, First-Year Enrollment, Total Enrollment and Graduates by Osteopathic Medical School at [http://www.aacom.org/data/studentenrollment/Documents/2008-2013\\_AppEnrollGrad.pdf](http://www.aacom.org/data/studentenrollment/Documents/2008-2013_AppEnrollGrad.pdf); Liberty Journal, New dean lays groundwork for Liberty's medical school at <http://www.liberty.edu/libertyjournal/?PID=24995&MID=56751>; and College of Osteopathic Medicine receives provisional accreditation, at <http://www.liberty.edu/lucom/index.cfm?PID=28248&MID=96875>.

# Resident Position Increases Are Not Expected to Keep Pace with Medical School Graduates

## U.S. Medical School Enrollment

(%) increase of 2002 enrollment

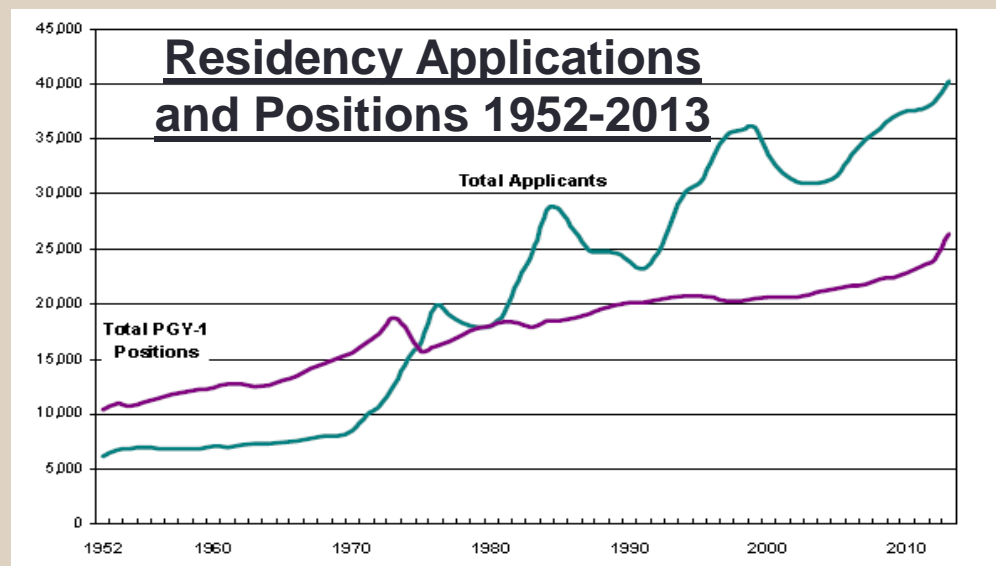
	2002 Enrollment	2012 Enrollment	2017 Projected Enrollment
<b>M.D.</b>	16,488	19,517 (18%)	21,434 (30%)
<b>D.O.</b>	2,968	5,804 (96%)	6,675 (125%)
<b>Total</b>	19,456	25,321 (30%)	28,109 (44%)

## U.S. RESIDENCIES (2013): 26,392 positions (PGY-1)

### Applicant type matches

- 16,390 U.S. seniors
- 2,706 U.S. IMGs
- 3,601 Non-U.S. IMGs

International medical school graduates (IMGs) and students who are U.S. citizens and non-U.S. citizens apply to U.S. residencies





# Medicare Residency Funding Remains at 1996 Levels

## Traditional Funding

1. U.S. Federal government
  - Largest supporter of graduate medical education
  - Program examples:
    - \$9.5 billion in Medicare funds
      - Funding remains at 1996 levels
    - \$2 billion in Medicaid funds
    - Department of Veterans Affairs
    - Department of Defense
2. Individual States
  - 40 states paid \$3.8 billion through Medicaid programs in 2009
3. Private insurers
  - Insurer payments to teaching hospitals are typically higher than what they pay other hospitals

## Virginia Funding

- Medicaid provides funding to residencies
  - FY09 - \$36 million in Direct and Indirect Medical Education funding to private hospitals
- Virginia provides general funds for family practice residencies and medical student programs
  - 2013 allotments:
    - EVMS \$ 722,146
    - UVA \$1,349,795
    - VCU \$4,217,317

64% of physicians that completed VCU's Family Practice Residency programs will practice in Virginia

# PPACA Residency Changes and Virginia Residency Enhancement

## PPACA

Patient Protection and Affordable Care Act (PPACA) encourages the development or expansion of teaching health centers - community-based, ambulatory, patient care centers that operate a primary care residency program.

- Examples: grants and provisions allowing providers to count teaching time toward their National Health Service Corps service requirement.

## New Activities

- Medical colleges are working with hospitals to develop new residencies. Examples include:
  - VCOM has collaborated with Lewis Gale Montgomery Regional Hospital (54 positions) and Danville Regional Health System (79 positions)
  - VCU and Patient First
    - Pilot to allow third-party payer reimbursement for 3<sup>rd</sup> year residents who work at Patient First sites, which may lead to hybrid private practice/residency program model.

# Geriatric and Team-Based Training Has Improved in Virginia

## Virginia Geriatric Education Center

- VCU, UVA, and EVMS Collaboration
- Established in 2010
- Funded by \$5.1 million HRSA grant for 5 years

### Goals

- **Geriatric Faculty:** Support training and retraining of faculty
- **Students:** Provide clinical training in geriatrics in diverse health care settings
- **Active Practitioners:** Support continuing education of health professionals who provide geriatric care
- **Curricula:** Develop, evaluate, and disseminate information relating to geriatric care

## VCU Medical School Training

- New requirement: Unfolding geriatric case of “Mattie Johnson”, virtual patient
- 7-9 person teams composed of senior professional students in medicine, nursing, pharmacy, and social work
- 11 week training
- Training platform allows for virtual collaboration
- Case focuses on 26 core geriatric competencies
- Measures individual and group performance, as well as collaborative behaviors

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# RECENT IMPACTS AND STATE POLICIES

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# Federal-State Provider Placement Programs

## Federal Virginia State Loan Repayment Program (SLRP)

- HRSA provides 1:1 match rate from state or community up to \$400,000
- Repayment provided to certain health care practitioners to serve in HPSA
- No currently dedicated State General Funds

## Conrad 30 J-1 Waiver Program

- VDH can request a J-1 visa waiver for non-U.S. citizen IMG physicians who have completed their residency that agree to practice in an underserved area
  - Maximum of 30 per year
  - *Note:* VDH also participates in the Appalachian Regional Commission (ARC) J-1 Visa Waiver Program, which can request additional J-1 visas waivers in a health care professional shortage areas.

Federal Fiscal Year	2008	2009	2010	2011	2012	2013
Loan Repayment (SLRP)	16	7	0	6	1	5
Conrad J-1 Waiver	21	13	20	24	30	30

Source: Document provided to JCHC staff by representatives of the Virginia Department of Health's Office of Minority Health and Health Equity.

# Military Credentialing and Licensing

- House Bill 1535 (2011)
- Physicians and other officer-level professions can be licensed through endorsement from other states.
- Enlisted-level occupations require extensive, professional-level cross-walking and gap analyses in comparison with civilian health professional licensure.
- In response to Delegate Stolle's request and upon request to participate in the DoD multi-agency Task force on Military Credentialing, the Department of Health Professions has been contributing to this analysis since March 2012.

# Legislative Changes on Collaborative Practice Allow for More Team-Based Care

	Nurse Practitioner	Physician Assistant	Pharmacist
# Practicing in Virginia	6,056	1,891	5,554
Legislation	HB 346 (O'Bannon-2012)	SB 106 (Edwards-2013)	HB 1501 (O'Bannon-2013)
Legislative Impact*	<ul style="list-style-type: none"> <li>Physician to NP ratio changed from 1:4 to 1:6</li> <li>No in-person requirement</li> </ul>	Physician to PA ratio changed from 1:2 to 1:6	Pharmacist may collaborate with NP or PA

\* See appendix for additional elements of legislation

Sources: Virginia Department of Health Professions, Healthcare Workforce Data Center Publications: *Virginia's Physician Assistant Workforce: 2010-2011*; March 2013: *Virginia's Pharmacist Workforce: 2011*, June 2011; and *Virginia's Nurse Practitioner Workforce: 2011-2013*, August 2013.

# Take Home

## **Demographics**

- Slightly more than half of physicians under age 40 are women
- Women physicians practice by approximately 11.5% fewer hours than their male peers
- Asian physicians comprise the largest ethnic minority at 17%
- Nearly 20% of physicians expect to retire in the next 5 years

## **Education and Training**

- Retention of medical school grads and residents is essentially unchanged from 2010
- About half of Virginia's physicians are educated and trained in bordering or nearby states



# Take Home

## **Workforce Mal-distribution**

- The physician to population ratio is especially low in Southside and Southwest Virginia and in some urban areas
- Legislation such as HB346 and HB1501 enable efficiencies through patient care teams, collaborative care, and healthcare related IT to ease the burden of care carried by too few physicians.

## 2013 JCHC Approved Policy Option to Improve Population Health Measurement

By letter of the JCHC Chair, request that the Virginia Department of Health (VDH) and Virginia Center for Health Innovation collaboratively:

- Identify statewide core regional population health measurements, including options for their collection and dissemination;
- Consider leveraging existing efforts such as the Virginia Atlas of Community Health and the Community Health Needs Assessments (as mandated for not-for-profit hospitals) and consult (at a minimum) with representatives of:
  - *Council on Virginia's Future*
  - *Department of Medical Assistance Services*
  - *Medical Society of Virginia*
  - *Virginia Association of Free and Charitable Clinics*
  - *Virginia Chamber of Commerce*
  - *Virginia Community Healthcare Association*
  - *Virginia Hospital & Healthcare Association*
  - *Virginia Rural Health Association*
- Report to JCHC by October 2015 regarding conclusions and recommendations to improve measurement and tracking of population health in Virginia.